

Sim & McBurney

Patent and Trade-mark Agents

330 University Avenue
6th floor
Toronto, Canada
M5G 1R7

Telephone 416-595-1155
Fax 416-595-1163

MICHAEL I. STEWART
ROGER T. HUGHES, Q.C.
TONI POLSON ASHTON
JOHN H. WOODLEY
KENNETH D. MCKAY
TIMOTHY M. LOWMAN
STEPHEN M. LANE
ARTHUR B. RENAUD
STEPHEN J. PERRY
PATRICIA A. RAE
DAVID A. RUSTON
L.E. TRENT HORNE
LOLA A. BARTOSZEWICZ
THOMAS T. RIEDER
WARREN J. GALLOWAY
STEVEN L. NEMETZ
URSULA M. McGUINNESS
ROBERT C.T. LIANG

SENIOR CONSULTANTS
PETER W. MCBURNEY
BRENDA L. BOARDMAN

TECHNICAL ASSISTANTS
KIMBERLY A. MCMANUS, PH.D.
PETER S. HARRISON, PH.D.
LESLEY M. MORRISON, B.SC.MECH.
GEOFFREY B.C. DEKLEINE, M.SC.(ENG.)
WENDY M. NOSS, B.A., L.L.B.

Please Quote
Our ref. 1038-1153 MIS:ac

Your ref.

Writer's Ext. 239

September 20, 2001

BY COURIER

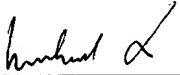
The Commissioner of Patents
and Trademarks,
Washington, D.C.
U.S.A. 20231

Dear Sirs:


Re: U.S. Application No. 09/857,305
Applicant: Robert C. Brunham et al
Title: TWO-STEP IMMUNIZATION PROCEDURE
AGAINST CHLAMYDIA INFECTION
Filed: December 2, 1999

Further to the Information Disclosure Statement submitted in
August 21, 2001, submitted herewith are copies of the references asterisked in
the Information Disclosure Statement listing and indicated to follow. The item
indicated by asterisk will follow shortly.

Yours very truly,


Michael I. Stewart
Registration No. 24,973

MIS:ac
Enclosures

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO.: 1038-1153 MIS:ac	SERIAL NO.: 09/857,305
 INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Robert C. Brunham, et al.	
		FILING DATE December 2, 1999	GROUP ---

U.S. PATENT DOCUMENTS

*INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUBCL.	FILING DATE
		5,770,714	23/06/98	Agabian et al	536	23.1	
		5,389,368	14/02/95	Gurtiss, III			
		5,629,167	13/04/97	Ratti			
		5,869,608	09/02/99	Caldwell et al			
		6,024,961	15/02/00	Curtiss, III et al			
		6,001,372	14/12/99	DeMars et al			

FOREIGN PATENT DOCUMENTS

		DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCL.	TRANSLATION	
		EP 0192033	27/08/86	EPO			YES	NO
		WO 98/10789	19/03/98	PCT				
		WO 98/02546	22/01/98	PCT				
		WO 97/06263	20/02/97	PCT				
		WO 95/12411	05/11/95	PCT				
		WO 94/26900	24/11/94	PCT				
		WO 94/21291	09/29/94	PCT				
		WO 98/48026	29/10/98	PCT				


OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	1	Grayston, J.T. and S.-P. Wang. 1975. New knowledge of chlamydiae and the diseases they cause. J. Infect. Dis., 132: 87-104.
	2	Grayston, J.T., S.-P. Wang, L.-J. Yeh, and C.-C. Kuo. 1985. Importance of reinfection in the pathogenesis of trachoma. Rev. Infect. Dis. 7:717-725.
	3	Taylor, H.R., et al., 1982. Animal Model of Trachema. II. The importance of repeated infection. Invest. Ophthalmol. Visual. Sci. 23:507-515.
	4	Taylor, H.R., et al. 1981. An Animal Model for Cicatrizing Trachoma. Invest. Ophthalmol. Sci. 21:422-433.
	5	Caldwell, H.D., et al. 1987. Tear and serum antibody response to <i>chlamydia trachomatis</i> antigens during acute chlamydial conjunctivitis in monkeys as determined by immunoblotting. Infect. Immun. 55:93-98.
	6	Wang, S.-P., et al., 1985. Immunotyping of <i>Chlamydia trachomatis</i> with monoclonal antibodies. J. Infect. Dis. 152:791-800.

EXAMINER:

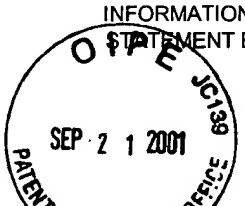
DATE CONSIDERED:

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1038-1153 MIS:ac	SERIAL NO. 09/857,305
 INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT: Robert C. Brunham, et al	
		FILING DATE December 2, 1999	GROUP ---

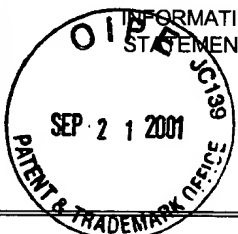
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
7	Nichols, R.L., et al., 1973. Immunity to chlamydial infections of the eye. VI. Homologous neutralization of trachoma infectivity for the owl monkey conjunctivae by eye secretions from humans with trachoma. J. Infect. Dis. 127:429-432.	
8	Orenstein, N.S., et al., 1973. Immunity to chlamydial infections of the eye V. Passive transfer of antitrachoma antibodies to owl monkeys. Infect. Immun. 7:600-603.	
9	Ramsey, KH, et al., (Mar. 1991) Resolution of Chlamydia Genital Infection with Antigen-Specific T--Lymphocyte Lines. Infect. and Immun. 59:925-931.	
10	Magee, DM, et al., (1995). Role of CD8 T Cells in Primary <i>Chlamydia</i> Infection. Infect. Immun. Feb. 1995. 63:516-521.	
11	Su, H. and Caldwell, HD., (1995) CD4+ T Cells Play a Significant Role in Adoptive Immunity to <i>Chlamydia trachomatis</i> Infection of the Mouse Genital Tract. Infect. Immun. Sept. 1995, 63: 3302-3308.	
12	Beatty, PR., and Stephens RS., (1994) CD8+ T Lymphocyte-Mediated Lysis of <i>Chlamydia</i> -Infected L Cells Using an Endogenous Antigen Pathway., Journal of Immun. 1994, 153:4588.	
13	Starnbach, MN., Bevan, MJ. and Lampe, MF. (1994), Protective Cytotoxic T. Lymphocytes are Induced During Murine Infection with <i>Chlamydia trachomatis</i> , Journal of Immun. 1994, 153:5183-5189.	
14	Starnbach, MN, Bevan, MJ. And Lampe, MF., (1995), Murine Cytotoxic T. Lymphocytes Induced Following <i>Chlamydia trachomatis</i> Intraperitoneal or Genital Tract Infection Respond to Cells Infected with Multiple Serovars., Infect. & Immun. Sept. 1995, 63:3527-3530.	
15	Igietseme, JU, (1996), Molecular mechanism of T-cell control of <i>Chlamydia</i> in mice: role of nitric oxide <i>in vivo</i> . Immunology 1996, 88:1-5.	
16	Igietseme. JU, (1996), The Molecular mechanism of T-cell control of <i>Chlamydia</i> in mice; role of nitric oxide. Immunology 1996, 87:1-8.	
17	Ward, M.E. 1992. Chlamydial vaccines – future trends. J. Infection <u>25</u> , Supp. 1:11-26.	
18	Caldwell, H.D., et al., (1981). Purification and partial characterization of the major outer membrane protein of <i>Chlamydia trachomatis</i> . Infect. Immun. 31:1161-1176.	
19	Bavoil, P., Ohlin, A. and Schachter, J., (1984) Role of Disulfide Bonding in Outer Membrane Structure and Permeability in <i>Chlamydia trachomatis</i> . Infect. Immun., 44: 479-485.	
20	Campos, M., et al., (1995) A <i>Chlamydia</i> Major Outer Membrane Protein Extract as a Trachoma Vaccine Candidate., Invest. Ophthalmol. Vis. Sci. <u>36</u> :1477-1491.	
21	Zhang Y.-X., et al., (1989). Protective monoclonal antibodies to <i>Chlamydia trachomatis</i> serovar- and serogroup-specific major outer membrane protein determinants. Infect. Immun. 57:636-638.	
22	Zhang, Y.-X., et al., 1987. Protective monoclonal antibodies recognise epitopes located on the major outer membrane protein of <i>Chlamydia trachomatis</i> . J. Immunol. 138:575-581.	
EXAMINER:		DATE CONSIDERED:

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 1038-1153 MIS:ac	SERIAL NO. 09/857,305
INFORMATION DISCLOSURE STATEMENT BY APPLICANT 		APPLICANT: Robert C. Brunham, et al.	
		FILING DATE December 2, 1999	GROUP ---

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
23	Department of Health and Human Services, (1989) Nucleotide and amino acid sequences of the four variable domains of the major outer membrane proteins of <i>Chlamydia trachomatis</i> . Report Nos: PAT-APPL-7-324664. National Technical Information Services, Springfield, VA.	
24	Yuan, Y., et al. (1989) Nucleotide and deduced amino acid sequences for the four variable domains of the major outer membrane proteins of the 15 <i>Chlamydia trachomatis</i> serovars. Infect. Immun. 57:1040-1049.	
25	Su, H. and Caldwell, H.D. 1992. Immunogenicity of a chimeric peptide corresponding to T-helper and B-cell epitopes of the <i>Chlamydia trachomatis</i> major outer membrane protein. J. Exp. Med. 175:227-235.	
26	Su, H., N.G. Watkins, Y.-X. Zhang and H.D. Caldwell (1990). <i>Chlamydia trachomatis</i> -host cell interactions: role of the chlamydial major outer membrane protein as an adhesin. Infect. Immun. 58:1017-1025.	
27	Peeling, R., I.W. McClean and R.C. Brunham. (1984). <i>In vitro</i> neutralization of <i>Chlamydia trachomatis</i> with monoclonal antibody to an epitope on the major outer membrane protein. Infect. Immun. 46:484-488.	
28	Lucero, M.E. and C.-C. Kuo. (1985). Neutralization of <i>Chlamydia trachomatis</i> cell culture infection by serovar specific monoclonal antibodies. Infect. Immun. 50:595-597.	
29*	Baehr, W., et al. (1988) Mapping antigenic domains expressed by <i>Chlamydia trachomatis</i> major outer membrane protein genes. Proc. Natl. Acad. Sci. USA, 85:4000-4004.	
30	Stephens, R.S., et al. (1988) High-resolution mapping of serovar-specific and common antigenic determinants of the major outer membrane protein of <i>Chlamydia trachomatis</i> . J. Exp. Med. 167:817-831.	
31	Conlan, J.W., I.N. Clarke and M.E. Ward. (1988). Epitope mapping with solid-phase peptides: Identification of type-, subspecies-, species-, and genus-reactive antibody binding domains on the major outer membrane protein of <i>Chlamydia trachomatis</i> . Mol. Microbiol. 2:673-679.	
32	Conlan, J.W., et al., (1990). Isolation of recombinant fragments of the major outer membrane protein of <i>Chlamydia trachomatis</i> : their potential as subunit vaccines. J. Gen. Microbiol. 136: 2013-2020	
33	Morrison, R.P., D.S. Manning, and H.D. Caldwell. (1992). Immunology of <i>Chlamydia trachomatis</i> infections. p. 57-84 In T.C. Quinn (ed) Sexually transmitted diseases. Raven Press Ltd., NY.	
34	Kersten, G.F.A. and Crommelin, D.J.A. (1995). Liposomes and ISCOMs as vaccine formulations. Biochimica et Biophysica Acta 1241 (1995) 117-138.	
35	Morein, B., et al., (1990) The iscom - a modern approach to vaccines seminars in Virology, Vol. 1, 1990: pp. 49-55.	
EXAMINER:		DATE CONSIDERED:

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

FORM PTO-1449		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. 1038-1153 MIS:ac		SERIAL NO. 09/857,305	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT 				APPLICANT: Robert C. Brunham, et al.			
				FILING DATE December 2, 1999		GROUP ---	
				OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	36	Mowat & Reid, 1992. Preparation of Immune Stimulating Complexes (ISCOMs) as Adjuvants. Current Protocols in Immunology 1992. Supplement 4: 2.11.1. to 2.11.12.					
	37	M.A. Liu et al. 1995. Ann. N.Y. Acad. Sci. 772.					
	38	W.M. McDonnell and F.K. Askari 1996. N.Engl. J. Med. 334:42-45.					
	39	J.B. Ulmer et al. 1993. Science 259:1745-1749.					
	40	M. Sedegah et al. 1994. Proc. Natl. Acad. Sci. U.S.A. 91:9866.					
	41	A. Darji et al. 1997. Cell 91:765-775.					
	42	D.R. Sizemore, 1997. Vaccine 15:804-807.					
	43	D. O'Callaghan and A. Charbit. 1990. Mol. Gen. Genet. 223:156-158.					
	44	R. Brunham et al. 1994. J. Clin. Invest. 94:458-463.					
	45	R.P. Morrison et al. 1995. Infect. Immun. 63:4661-4668.					
	46	K.Y. Leung et al., 1991, PNAS 88(24):1147-4.					
	47	Hayes L.J. et al., Journal of General Microbiology (1991), 137, 1557-1564.					
	48	Boslego W.J. & Deal D.C. Gonorrhea Vaccines pp. 211-224.					
	49	Ellis W. Ronald (Plotkin & Mortimer) Technologies for Making Vaccines. pp. 568-575.					
	50	American Society for Microbiology May 1989. Abstracts of the Annual Meeting.					
	51	Taylor H.R. et al., Oral Immunization Against Chlamydial ... 1987, Vol. 28, pp. 249-258					
	52	Rank G.R. et al., Investigation Ophthalmology & Visual Science 1995., Vol. 36, pp. 1344-1351.					
	53	Rank G.R. et al., Infection and Immunity 1990. p. 2599-2605.					
	54	Myers G., Sriprakash S.K. Chlamydia Trachomatis DNA Encodes Homologues of Salmonella. Biology 40.					
	55	Holst O. ; Thomas-Oates E.J.; Brade H. Fur. J. Biochem. 222, 183-194 (1994)					
	56	Evans D J; Minor P D; Almond J W. J.Appl.Bacteriol. (69,6,xiii) 1990.					
	57	Brade L. et al., Infection and Immunity . 1987, p. 482-486.					
	58	Ferris S., Antibody responses to the major outer membrane protein of chlamydia trachomatis. P.1-115					
	59	May W.S., Cloning, sequencing and expression of the major outer membrane protein (MOMP) genr of feline chlamydia psittaci and evaluation of the immunogenicity of recombinant momp in mice.					
	60	Peterson M.E. Infection and Immunity 1996, p. 3354-3359.					
EXAMINER:				DATE CONSIDERED:			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication with applicant.

* Will follow shortly